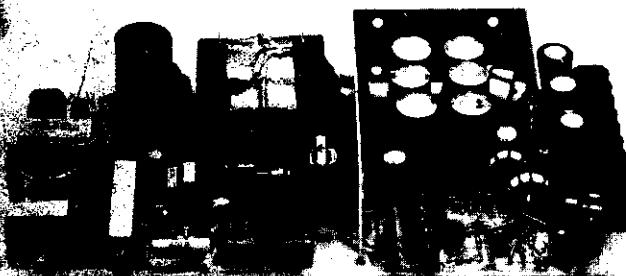


SERIES XL100

MULTIPLE OUTPUT SWITCHERS



XL100

XL100 Series

The XL100 Series of 4 output 100W switching power supplies offers outstanding features, pricing and value.

Designed for microprocessor based applications, the XL100 can power Winchester disks, memory boards, tape cassettes and monitors.

The XL100 is the XL125 with the heat sink removed and is rated at 100W power in 250°C ambient with no air flow, and with no external heatsinking. External heatsinking or forced air can allow the XL100 to provide the same ratings as the XL125, as long as heatsink temperatures are kept below 90°C and semiconductor cases below 100°C under the worst-case system operating conditions.

STANDARD FEATURES

- Designed to meet VDE 0806 safety.
- Designed to meet VDE 0871 level A.
- Designed to meet FCC 20708 level B EMI.
- Designed to meet IEC 380 safety.
- Designed to meet CSA C22.2 #154 safety.
- Designed to meet UL478 safety.
- 110VAC/220VAC user selectable input.
- Short circuit protection.
- Overvoltage protection (+5V output).
- Input surge current protection.
- 20KHz switching frequency (minimum).
- All models are provided with power-fail detect output.

SELECTION GUIDE

Model Number	Output Voltages and Maximum Current						Rated Power	Max. Positive Current
	+5V	+12V	-12V	-5V	+24V	+12V		
XL100-3601	10A	4A	0.7A	0.7A			100W	14A
XL100-3602	10A	4A	0.7A		3A		100W	14A
XL100-3603	10A	4A	0.7A			1.5A	100W	14A

To order models meeting British Telecomm safety specifications, order -3801, -3802 or -3803 instead of -3601, -3602 or -3603.

To order models with the VDE safety sticker affixed, order -3601V, -3602V or -3603V. Please consult the factory.

To order models with the input voltage set for 220 VAC, order -4601, -4602, -4603, -4801, -4802, -4803, -4601V, -4602V or -4603V.

LOAD REGULATION

Load regulation depends strongly on how much power is drawn from each output and the minimum to maximum range of the current. The maximum current cannot be taken from all outputs simultaneously without possibly overheating the power supply or causing over-power shutdown.

Model Number	Output	Minimum	Maximum	Ripple	Tolerance
XL100-3601	+5V	2A	10A	50mV	±3%
	+12V	0.8A	4A	80mV	±4%
	-12V	0A	0.7A	50mV	±5%
	-5V	0A	0.7A	25mV	±5%
XL100-3602	+5V	2A	10A	50mV	±3%
	+12V	0.4A	4A	50mV	+2%-6%
	-12V	0A	0.7A	80mV	±5%
	+24V	1.0A	3A	80mV	+8%-3%
XL100-3603	+5V	2A	10A	50mV	±3%
	+12V	0.8A	4A	50mV	±4%
	+12V	0.5A	1.5A	50mV	±8%
	-12V	0A	0.7A	50mV	±5%

1) 50MHz bandwidth, peak to peak, measured differentially.

ELECTRICAL CHARACTERISTICS

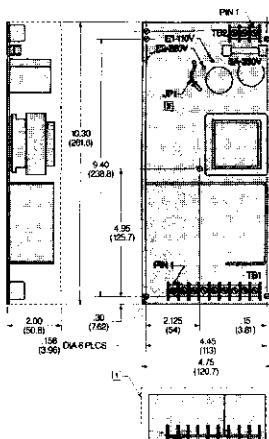
Parameter	Conditions	Limits
Input Voltage	All rated load conditions	90-132VAC 180-264VAC User selectable
Input Surge Current	115VAC, cold start, peak current	32A
Input Frequency Range		47Hz to 440Hz
Input Line Regulation	Low line to high line, full load	± 0.3% to all outputs
Efficiency	115VAC, 100W output	65% minimum
Output Power Range	50° ambient	20W to 100W
Hold-up Time	110VAC, 100W output	22mSec minimum
Adjustability	+5 output	4.8V to OVP trip point
Oversupply Protection Threshold	± 5V output	6.25V ± 0.75V
Temperature Coefficient of Outputs	All Outputs	± 0.04%/°C maximum
Safety Ground Leakage Current	240VAC, 60Hz	0.5mA maximum
Power Limit Point	All line and load conditions	140W minimum
Temperature Range	Operating ambient Storage ambient Maximum heatsink temperature Maximum semiconductor case temperature	0°C to +70°C -20°C to +85°C 90°C 100°C
Temperature Derating	Free air connection	Derate linearly from rated power at 50°C to half rated power at 70°C ambient
Altitude	Operating Non-operating	10,000 ft 30,000 ft
Relative Humidity	Non-condensing	5% to 95%
Vibration	Three principal axes 2G cycling or dwell type	5Hz to 60Hz at 3 minutes per octave
Transient Response	+5 output, 5A to 10A load change	150mV peak transient setting to within 0.5% of regulation band 1mSec.
	+ 12V and + 24 outputs, 2A to 4A load change	100mV peak transient setting to within 0.5% of regulation band 1mSec.
Power Fail Detect	Maximum sinking current open collector output	30mA minimum

MECHANICAL SPECIFICATIONS

Dimensions are in inches and (mm). All tolerances are less than ± 0.03 inches (0.76 mm).

PIN CHARTS

	XL100/3601	XL100/3602	XL100/3603
TB2	Term 1 - AC Hot	AC Hot	AC Hot
	Term 2 - AC Ground	AC Ground	AC Ground
	Term 3 - AC Neutral/Hot	AC Neutral/Hot	AC Neutral/Hot
TB1	Term 1 P.F.D.	P.F.D.	P.F.D.
	Term 2 - 12V	- 12V	- 12V
	Term 3 + 12V	+ 12V	+ 12V
	Term 4 - 5V	+ 24V	+ 12V
	Term 5 Return	Return	Return
	Term 6 Return	Return	Return
	Term 7 Return	Return	Return
	Term 8 + 5V	+ 5V	+ 5V
	Term 9 + 5V	+ 5V	+ 5V



- ① Dashed line indicates minimum clearance.
- ② Connect JP1 to E1 for 110V operation.
Connect JP1 to E2 for 220V operation.

3. Dimensions for reference only.

Connector Type

TB1 is Beau Inc.
P/N 72-5-09C
TB2 is Beau Inc.
P/N 72-5-03C
6-32 screws on 0.375 in. centers

Fuse Type

5A, 250VAC
3AE, Normal Blow

Boschert Incorporated
384 Santa Trinita Avenue
Sunnyvale, California 94066
408/732-2440 TWX 910-339-9241

